

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-318348

(43)Date of publication of application : 04.12.1998

(51)Int.Cl.

F16H 41/30

(21)Application number : 09-129488

(71)Applicant : HITACHI LTD

(22)Date of filing : 20.05.1997

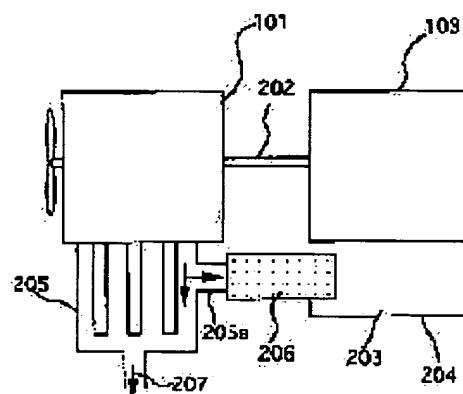
(72)Inventor : OCHI TATSUYA
KIMURA HIROSHI
ONISHI HIROSHI
HOSHINO MASATOSHI

(54) AUTOMATIC TRANSMISSION FOR AUTOMOBILE

(57)Abstract:

PROBLEM TO BE SOLVED: To raise the temperature of tor-con oil to a prescribed temperature utilizing heat of exhaust gas or engine oil of an automobile, in a device formed in such a constitution that the tor-con oil is used in a power transmission medium for engaging/releasing operation of a clutch.

SOLUTION: In a device formed in such a constitution that power generated by an engine 101 is transmitted to an automatic transmission 103 through a transmission input axis 202, heat generated in the engine 101 side, for example, high temperature heat held by exhaust gas is moved to the automatic transmission 103 side, and the temperature of tor-con oil 203 is raised rapidly. Namely, a heat exchanger 206 for an exhaust gas is arranged between an exhaust pipe 205 and an oil pan 204 in order to utilize heat of exhaust gas 207 for raising a temperature of the tor-con oil 203, in the case where exhaust gas 207 whose temperature is raised just after the engine 101 is started is delivered through the exhaust pipe 205. It is thus possible to raise the temperature of the tor-con oil 203 in the automatic transmission 103 at the time of cooling just after start.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

(12)日本特許庁 (JP) (14)公開特許公報 (A) (11)特許公開番号
特開平10-318348

(43)公開日 平成10年09月04日

(51)IPC 分類 電機部 F1
F16H 41/00 F16H 41/00 C

審査請求 未請求 請求項の数 4 01 (全 6 頁)

(11)公開番号	特開平10-318348	(71)出願人	00005108 株式会社日立製作所 東京都千代田区神田墨田区両国6番地
(22)公開日	平成10年(1997)9月20日	(72)発明者	越智 辰雄 東京都立市大田区大田1番1号 株 式会社日立製作所日立研究所内
		(72)発明者	松村 博文 東京都立市大田区大田1番1号 株 式会社日立製作所日立研究所内
		(72)発明者	大田 浩文 東京都立市大田区大田1番1号 株 式会社日立製作所日立研究所内
		(70)代理人	弁護士 高田 幸彦 (外1名) 最終頁に続く

(54)【発明の名称】 自動車用自動変速機

(57)【要約】

【課題】早期昇温や小形化に結びつく自動車用自動変速機を提供する。

【解決手段】クラッチの駆動機構の動力伝達媒体にトルコンオイルを用いている自動車用自動変速機は、自動車に保有する排気ガス30の高温の熱を利用して、昇温時に、トルコンオイル30を動力伝達媒体として機能する所定温度に早期昇温する排気ガス用熱交換器36を具備する。

図1

